EXHIBIT D

MONITORING PROTOCOL

Introduction

The Conservation Easement for the Hearst Ranch will require monitoring to assure both the long-term stewardship of the Conservation Values as well as compliance with the specific easement requirements and restrictions. This Monitoring Protocol sets forth the basic requirements for the monitoring to be undertaken by the easement holder under WCB Grant Agreement No. [_____]. The parties to that Agreement understand and intend that the requirements and methodologies set forth in this Monitoring Protocol should be re-evaluated on a continuing basis and revised as appropriate in relation to changes in scientific understanding of stewardship practices and changes in available monitoring technologies.

Bases for Monitoring Standards and Practices

For this working landscape conservation project, the standards and practices set forth in the following references have been relied upon in the development of the elements of this Monitoring Protocol that address the monitoring of resource conditions.

Cooperative Extension, 1982, Guidelines for Residue Management on Annual Range: Leaflet 21327 University of California Division of Agricultural Sciences.

Cooperative Extension, 1985, Preliminary Guidelines for Managing California's Hardwood Rangelands: University of California Division of Agriculture and Natural Resources Publication 21413.

Cooperative Extension, 1990, Monitoring California's Annual Rangeland Vegetation: Leaflet 21486 University of California Division of Agriculture and Natural Resources.

National Research Council, 1994, Rangeland Health: National Academy Press.

United States Department of Agriculture, 1979, Recommended Plan of Conservation Management Practices: Soil Conservation Service Planning Staff, Davis, California.

United States Department of Agriculture, 1990, Proceedings of the Symposium on Oak Woodlands and Hardwood Range Management: Pacific Southwest Research Station General Technical Report PSW-126.

United States Department of Agriculture, 1996, Conservation Standards and Specifications Technical Guide Section IV: Natural Resource Conservation Service.

United States Department of Agriculture, 1997, National Range and Pasture Handbook: Natural Resource Conservation Service.

United States Department of Agriculture, 1998, A User Guide to Assessing Proper Functioning Condition for Stream Areas: TR 1737-15 Natural Resources Conservation Service, Bureau of Land Management, Forest Service.

United States Department of the Interior, 1998, Assessment of Rangeland Health Standards, Contributing Factors and Appropriate Actions: Bureau of Land Management Hollister District.

United States Department of the Interior, 1998, Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final EIS: Bureau of Land Management.

United States Fish and Wildlife Service, July 2000, Environmental Assessment Proposed Diablo Range Wildlife Management Area: Sacrament, California.

University of California Cooperative Extension, 1982, Guidelines for Residue Management on Annual Range: Leaflet 21327 Division of Agricultural Sciences.

University of California Cooperative Extension, 1990, Monitoring California's Annual Rangeland Vegetation: Leaflet 21486 Division of Agriculture and Natural Resources.

University of California Cooperative Extension, 1994, "How To" Monitor Rangeland Resources: Division of Agriculture and Natural Resources.

University of California Cooperative Extension, 2002, California Guidelines for Residual Dry Matter (RDM) Management on Coastal and Foothill Annual Rangelands: Publication 8092.

Baseline Conditions Report

The Baseline Conditions Report, referenced in Recital F of the Conservation Easement, provides a comprehensive description of the Conservation Values of the Easement Area, as well as of the uses and state of improvements existing as of the Effective Date of the Conservation Easement. It shall be used by the easement holder as a resource tool to assist in the monitoring of landowner compliance with the Conservation Easement.

Monitoring Elements

Monitoring shall be conducted not less frequently than annually. Timing for the routine yearly monitoring shall occur in the fall, prior to measurable rainfall. Occasional additional monitoring in the spring may be undertaken to more fully

characterize the seasonal range of resource conditions on the Easement Area. The basic elements of the annual monitoring shall address: 1) whether any prohibited acts have occurred; 2) whether the allowed uses under landowner retained rights are being conducted within the parameters of the easement; and 3) whether the Conservation Values are being protected in accordance with the requirements of the Conservation Easement. Supplemental monitoring shall be undertaken as reasonably needed to address and resolve problems identified in routine monitoring.

The yearly monitoring information requirements to assess compliance with the conservation easement prohibited acts and the permitted uses are set forth on the following checklist format. The easement holder monitor(s) shall check the appropriate boxes under yes or no as an answer to the checklist questions. Space is provided if explanations are needed for any of the questions.

Monitor Qualifications

The monitoring team for the yearly monitoring shall include a monitor having the education and professional experience qualifications required by the California Section of the Society for Ranch Management in its Program for Certification of Professional Rangeland Manager (set forth in the Attachment hereto). A Certified Rangeland Manager (certified by and a member in good standing of the Cal-Pacific Section of the Society for Range Management) will be deemed to satisfy those requirements. The qualifications of the other members of the monitoring team shall include such other educational and professional experience and credentials, including but not limited to those relating to plant ecology, wildlife biology, fisheries biology, and hydrology, as reasonably determined by the easement holder.

MONITORING CHECKLIST #1

DATE	**RANCH: Hearst Ranch**	**LOCATION: San Simeon**	**MONITORS:**
Check each box and fill in each column as appropriate			
Yes No	**Monitoring Condition**	**If Yes, Please Explain**	**Additional Comments/ Location**
	Have any prohibited acts occurred in the easement area?		
	Have any additional incidental ranch facilities been constructed on the easement area?		
	Have any non-residential buildings or other ranch operations structures been constructed on the easement area?		
	Have any residential dwellings and appurtenant structures been constructed on the easement area?		
	Have any recreational facilities been constructed on the easement area?		
	Have any billboards been constructed on the easement area?		
	Has any tree cutting occurred within the easement area?		

MONITORING CHECKLIST #1 (Continued)

Yes No	Monitoring Condition	If Yes, Please Explain	Additional Comments/ Location
	Has any commercial mining occurred within the easement area?		
	Have any new roads been constructed within the easement area?		
	Have any existing roads been paved within the easement area?		
	Have any new Reserved Farmland areas been farmed the past year?		New Acres: Total Acres:
	Have any industrial, recreational, or non-agricultural commercial uses occurred on the easement area?		
	Has a commercial feedlot been established within the easement area?		
	Have any employee housing units been constructed within the easement area?		
	Have any owner homesites been constructed within the easement area?		If yes – see below.

MONITORING CHECKLIST #1 (Concluded)

Yes No	Monitoring Condition	If No, Please explain	Additional Comments/ Location
	Does each owner homesite meet the location criteria whereby: Highway 1 viewshed is screened - Castle viewshed is screened - Access is by existing ranch road or otherwise in compliance with Exhibit H - Building sites less than 30% slope - Building sites 100'+ setback from top of streambank - Building sites 100'+ setback from defined wetland - Oak woodland is not impaired- Other Sensitive habitat areas are not impaired- Archaeological and cultural resources are not impaired-	***[The general form does not preclude that in practice.]***	
	Are the rangeland and Conservation Values being managed and utilized consistent with the intent of the conservation easement?		

The Hearst Ranch contains vast areas of both productive, well-managed rangeland and significant undisturbed natural resources. The rangeland management is crucial to much of the overall natural resource maintenance and is the major determinant factor for long-term stewardship of those resources. The vegetative conditions on approximately 32,000 acres of the Hearst Ranch are directly influenced by livestock grazing management and use including "edge areas" of many of the plant communities. These areas are shown on the Natural Resources Map in the Baseline Conditions Report.

Approximately 50,000 acres of the natural resource Conservation Values are either minimally utilized or unutilized by livestock grazing and ranch operations simply because of inaccessibility of livestock and lack of livestock forage. However, these areas are readily utilized by wildlife and contain important plant communities. The health and maintenance of these areas occurs as a part of the natural wildlife, climatic, and fire cycles of the region.

Six reliable monitoring practices shall be used for the evaluation of long-term stewardship and natural cycle changes of the rangeland and associated habitat conditions: 1) Determinations of representative photo point locations; 2) Observations of rangeland and habitat health; 3) Assessment of stream proper functioning conditions; 4) Rangeland residual dry matter observations; 5) Representative rangeland forage clippings; and 6) Color aerial photograph interpretation of natural resources and ranch uses. Each of these practices is further described below.

1) Representative photo points are instrumental in determining overall landscape changes over time that may be related to management changes, climate, natural processes such as fire and flood, and biological processes. A photo point form is included as Monitoring Checklist #2 and shall be utilized by the monitors on annual site inspection visits. Representative photo point locations shall be established for yearly photo documentation with the easement holder and Hearst Ranch representatives in fall of 2004 or 2005 depending on the date of the easement initiation. Finalized photo point locations shall be shown on an ortho-photo base map along with GPS coordinates and direction of photo for each photo point. Photo points shall be representative of rangeland, cropland, riparian, stream, and natural resource community landscapes. At each photo point location, Monitoring Checklists for rangeland and habitat health, stream proper functioning conditions, and rangeland residual dry matter shall be completed, as applicable. For example, a photo point location showing Santa Lucia firs would probably not show rangeland residual dry matter due to the dense forest canopy cover but would show the overall condition of the Santa Lucia fir stand habitat. Additional photo point locations may be added in subsequent years, as needed.

2) Rangeland and habitat health monitoring will require yearly evaluation of seventeen factors that are shown on Monitoring Checklist #3. Overall health of the habitat communities is easily incorporated in this checklist per applicable representative photo point. These factors shall be observed and recorded in checklist form at each designated photo point location.

The rangeland and habitat health indicators have been developed by the Natural Resource Conservation Service in order to assess departures from normal characteristics. Overall normal rangeland health maintains or improves soil fertility, reduces erosion and sedimentation, improves water quality, allows for plant community biodiversity and management, and provides suitable habitat for wildlife.

As an aid to the completion of Monitoring Checklist #3, the rangeland health and habitat evaluations shown on the following page are included. These soil, water, and vegetation indicators are classified from normal to extreme conditions.

INDICATOR	NORMAL		TO EXTREME
Rills	**No recent formation**	**to**	**Severe and well defined.**
Water Flow Patterns	**Minimal soil erosion**	**to**	**Active flow erosion**
Soil Pedestalling	**Minimal pedestalling**	**to**	**Rocks and plants pedestalled**
Bare Ground	**Small bare areas**	**to**	**Large bare areas connected**
Gullying cutting	**Natural stable channels**		**to Active head cuts/down**
Wind Erosion	**None to infrequent**	**to**	**Extensive wind scouring**
Cryptobiotic Soil Crusts	**Surface soil is stable**	**to**	**Loose soil surfaces**
Soil Organic Layer	**Organic materials present**	**to**	**Organic materials absent**
Water Infiltration	**Normal per soil type**	**to**	**Compaction-no infiltration**
Surface Water Runoff	**Controlled by vegetation**	**to**	**No vegetation influence**
Plant Mortality	**Few dead plants/decadence**	**to**	**Dead plants/decadence abundant**
Plant Community Changes	**Closely matches historic climax community**	**to**	**Climax community decreasing with invasive plants dominant**
Plant Litter	**Litter common for site**	**to**	**Minimal to no litter present**
Perennial Plant Stress	**Minimal signs of stress**	**to**	**Severe stress with dead/dying**
Plant Growth Production	**Growth exceeds 80% of potential production**	**to**	**Growth less than 20% of potential production**
Invasive Plants	**Not present**	**to**	**Dominate the site**
Plant Reproduction	**Seed and tiller reproduction are common**	**to**	**Severe reduction in seed and tiller production**

For monitoring, the above indicators are evaluated in categories that range from normal with none to slight deviations from normal, to not normal with extreme deviations from normal and filled in on Monitoring Checklist #3. A summary discussion is also to be included for deviations from normal.

3) Stream proper functioning conditions will require yearly evaluation of seventeen factors that are shown on the Monitoring Checklist #4. These factors will be utilized for the determination of overall stream proper functioning conditions as well as stream-related erosion and deposition, riparian vegetation, water quality, and riparian plant composition. Evaluation of the overall proper functioning condition of the riparian-related Conservation Values shall be included in the checklist per applicable representative photo point. These factors shall be observed in checklist form at each designated photo point location.

The Natural Resources Conservation Service, the Forest Service, and the Bureau of Land Management, for assessing the conditions of riparian-wetland areas, have established stream proper functioning condition evaluation standards. Hearst Ranch grazing management, climatic trends, and ranch stewardship are the primary factors affecting riparian and wetland functionality.

Riparian areas are considered to be properly functioning if they have the following attributes:

Adequate vegetation, landform, or large woody debris present in order to:

- Dissipate stream energy associated with high water flow, thereby reducing erosion and improving water quality;
- Filter sediment, capture bed load, and aid floodplain development;
- Improve floodwater retention and ground water recharge;
- Develop root masses that stabilize stream banks against cutting action;
- Develop diverse ponding and channel characteristics to provide habitat water depth, duration and temperature necessary for fish production, waterfowl breeding and other uses; and
- Support greater plant and wildlife biodiversity.

There are a number of additional parameters that are used to determine if a riparian area is a properly functioning unit. These include:

<u>Hydrology</u>

- Floodplain above bank-full is inundated in "relatively frequent events;
- Sinuosity, width/depth ratio, and gradient are in balance with the

landscape setting (i.e., landform, geology, and bioclimatic region);

- Riparian-wetland area is widening or has achieved potential extent; and
- Upland watershed is not contributing to riparian-wetland degradation.

Vegetation

- There is diverse age-class distribution of riparian-wetland vegetation;
- There is diverse composition of riparian-wetland vegetation;
- Species present indicate maintenance of riparian-wetland soil moisture characteristics;
- Stream bank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high-stream flow events;
- Riparian-wetland plants exhibit high vigor;
- Adequate riparian-wetland vegetation cover is present to protect banks and dissipate energy during high flows; and
- Plant communities are an adequate source of coarse-large woody material (for maintenance/recovery).

Erosion/Deposition

- Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy;
- Point bars are re-vegetating with riparian-wetland vegetation;
- Lateral stream movement is associated with natural sinuosity;
- Stream system is vertically stable; and
- Stream is in balance with water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition).

Stream functionality is directly related to climatic conditions, rangeland management and ranch operational practices including: livestock grazing, range

management, infrastructure siting and use, farmland practices, road use and maintenance, and wildlife management. A discussion of non-functioning areas is to be included in each checklist, as appropriate.

4) Rangeland residual dry matter observations shall occur yearly at each representative photo point location and are to be recorded on Monitoring Checklist #5. Interim residual dry matter (RDM) standards are included in the Conservation Easement. These interim standards conform to the updated standards published by University of California Cooperative Extension (UCCE) in 2003. Residual dry matter is an important factor for determining overall rangeland cover that is directly related to grazing intensity and distribution, climate conditions, and forage palatability. Adequate levels of residual dry matter are important for providing next years annual grassland seed crop, for promoting the vigor of perennial grasslands, for reducing erosion and sedimentation, and for preserving water quality and rangeland health.

In 2003, UCCE researchers reevaluated RDM standards that had been utilized as rangeland management standards since the 1950's. These standards were established to provide a high degree of protection from soil erosion and nutrient loss and to promote rangeland productivity. For the Hearst Ranch rangeland areas, the following minimum acceptable performance standards shall apply as a guideline for monitoring.

0 to 10% slopes: an average of 2" of residual dry matter – approximately an average of 500 pounds per acre. Description: In some areas rangeland will show evidence of extensive grazing. Residual vegetation is patchy with some areas grazed to less than one inch and other areas with greater vegetation remaining. Bare ground showing evidence of pocket gopher activity may exist. Golf ball objects are clearly visible at a distance of 10 feet and mostly visible at a distance of 20 feet.

Additionally, scattered areas of perennial bunchgrass coastal prairie are concentrated on coastal terraces, within the coastal plain, with 0 to 10% slope. In these areas an average of 6" of residual dry matter – an average of approximately 1,200 pounds per acre shall remain.

11 to 30% slopes: an average of 3" of residual dry matter – approximately an average of 750 pounds per acre. Description: In some areas rangeland will typically show clear evidence of grazing. Seed stalks may be heavily utilized or trampled. Considerable ground cover and leaf litter may be present. Some bare soil will be apparent including pocket gopher activity, visible from a distance of 20 feet. Many golf ball sized objects are partially visible at a distance of 10 feet, and some may be barely visible at a distance of 20 feet.

Greater than 30% slopes: an average of 4" of residual dry matter – approximately an average of 1,000 pounds per acre. Description: In some areas rangeland may show evidence of considerable grazing use. Seed stalks may be heavily utilized. Ground cover is essentially complete. Little bare soil is apparent except for occasional pocket gopher activity and livestock/game trails. Some golf ball sized objects may be visible or only barely visible at a distance of 10 feet but seldom visible at a distance of 20 feet.

The RDM standards shall not be applied in the following contexts.

- Pastures that are burned, roads, tanks and reservoir sites, and rock outcrops.

- Areas within one hundred (100) yards of watering troughs, water tanks, salt and mineral licks, supplemental feed areas, holding fields/traps, animal handling corrals, or where animals may naturally congregate due to topography or weather.

- Areas of low fertility due to insufficient soil depth or quality and steep slopes regardless of grazing pressure.

- Areas with extensive tree or shrub canopy cover.

- Areas subject to periodic insect infestations such as from grasshoppers and crickets.

- Areas subject to feral pig ground damage, or other wild animal use and disturbance.

Seasonal climatic data including rainfall and distribution, drought, flooding, and high and low temperatures shall be included in the monitoring analysis. For example, during drought conditions 50% of unfavorable year production within NRCS Range Sites shall remain as rangeland residual dry matter.

RDM measurement areas and corresponding photo points are to be chosen as representative of typical soil series type areas as taken from the AMEP soil map.

5) Rangeland clippings shall occur every five years as necessary or indicated in order to help visualize any trend changes in forage composition over time. Trend changes can become readily apparent if rangeland management declines or prolonged drought occurs without management response. At this time the trend of rangeland grasses and forbs is positive meaning that current management has contributed to the long- term stewardship of plant communities

that are exemplary. UCCE research has shown that favorable plant succession or trend exists when plants such as purple needlegrass, deschamsia, California oat grass, California brome, soft chess, wild oats, bur clover, filaree, and Junegrass predominate. Declining rangeland conditions can occur over time and the above plants are succeeded by plants such as ripgut brome, red brome, turkey mullein, aster, radish, thistles, sagebrush, and lupine. These plants may also prefer sandy soils but should not occur on a large scale across the ranch and within different soil types. In the Baseline Conditions Report, 27 clipping sites were established on representative Range Site areas of the ranch along with general forage compositions for each site. Baseline Conditions Report soils map. The clippings determine the actual height of residual dry matter forage, the weight of the forage production, and the composition of the forage, per UCCE practices whereby a square foot clipping site is randomly chosen, palatable dry forage is clipped to about 1/4 inch to 1/2 inch, weighed in grams and multiplied by 100 to convert to pounds per acre. Monitoring Checklist #6 shall be used at the five-year intervals for data recording and evaluation. Many of the Range Site clipping areas contain a mix of native perennial grasses and introduced naturalized annual grasses that provide a diversity of livestock and wildlife forage. Invasive noxious plants are insignificant in composition in these areas at this time, so long-term monitoring should be able to show any trend changes to less palatable forage over time.

6) The color aerial photograph coverage included in the Baseline Conditions Report (one inch = 831 feet) shall be replicated every five years. Additional aerial reconnaissance and photographs may also be used to supplement ground-level photographs. The baseline aerial photographic coverage is of sufficient resolution to allow detection of plant community geographic changes over time, erosion, fire, vegetation community trends, and any other Conservation Easement infrastructure changes such as roads. Monitoring Checklist #7 shall be used at the five-year intervals for aerial photograph interpretation results and in connection with any additional aerial reconnaissance undertaken.

In summary, the following monitoring checklists shall be utilized for the evaluation of the long-term stewardship of the Conservation Values through the use and the determinations of –

- Representative Photo Points yearly;
- Rangeland and Habitat Health Evaluations yearly;
- Stream Proper Functioning Conditions yearly;
- Rangeland Residual Dry Matter Observations yearly;

- Forage Clippings, Production and Compositions every five years; and
- Color Aerial Photograph Interpretation every five years.

HEARST RANCH CONSERVATION EASEMENT
PHOTO POINT MONITORING CHECKLIST #2 – PAGE #__PHOTO #__

Monitors: **Date:** **Location:**

DESCRIPTION OF MONITORING ITEMS:

___ **Rangeland Health Monitoring**

___ **Stream Proper Functioning Conditions Monitoring**

___ **Residual Dry Matter (RDM) per Slope Percent:** ___ **0 – 10%** ___ **11 – 30%** ___ **>30%**

___ **Plant Communities Observed:**

___ **Any Infrastructure Changes:**

___ **Road Maintenance Observations:**

___ **Wildlife Observed:**

___ **Other Items:**

See monitoring photo point location map for photo locations and direction of photos.

HEARST RANCH CONSERVATION EASEMENT
RANGELAND-HABITAT HEALTH MONITORING CHECKLIST #3 –
DATE_____PAGE #___ PHOTO #___

Rangeland Health Indicators	Extreme or Not Normal	Moderate to Extreme or Becoming Not Normal	Moderate or Changing From Normal	Slight to Moderate or Near Normal	None to Slight or Normal
Rilling					
Water Flow Patterns					
Soil Pedestalling					
Bare Ground Occurrence					
Gullying					
Wind Erosion					
Cryptobiotic Soil Crusts					
Soil Organic Layer					
Water Infiltration					
Surface Runoff					
Plant Mortality					
Plant Community Change					
Plant Litter					
Perennial Plant Stress					
Plant Growth Production					
Invasive Plants					
Plant Community Reproduction					

Rainfall at Piedras Blancas: **Normal Year** ___ **Yes** ___ **No**

Rainfall at Hearst Castle: **Normal Year** ___ **Yes** ___ **No**

CONCLUSIONS:

DISCUSSION ITEMS:

HEARST RANCH CONSERVATION EASEMENT
STREAM PROPER FUNCTIONING CONDITION
MONITORING CHECKLIST #4 –
DATE_____PAGE #___ PHOTO #___

Stream Proper Functioning Conditions	Proper Functioning	Functional at Risk	Not Functioning
Floodplain Inundation Above Channel Bankfull			
Stream Morphology in Balance with Landscape			
Riparian Areas at Maximum Extent			
Upland Watershed Not Degrading Stream			
Diverse Riparian Vegetation Ages			
Riparian Species Indicate Soil Moisture			
Riparian Vegetation Contains High Root Masses			
Riparian Vegetation Exhibits High Growth Vigor			
Adequate Riparian Vegetation to Dissipate Energy			
Coarse or Large Woody Debris Present			
Channel Floodplain Can Dissipate Flow Energy			
Point-Bars Contain Riparian Vegetation			
Lateral Stream Movement is Natural Sinuosity			
Stream is Vertically Stable			
Stream Has No Excessive Erosion			
Stream Has No Excessive Deposition			

Rainfall at Piedras Blancas	Normal Year	___ Yes	___No
Rainfall at Hearst Castle:	Normal Year	___ Yes	___ No

CONCLUSIONS:

DISCUSSION ITEMS:

HEARST RANCH CONSERVATION EASEMENT
RESIDUAL DRY MATTER OBSERVATIONS
MONITORING CHECKLIST #5 –
DATE_____PAGE #___

PHOTO POINT# and PLANT COMMUNITY	OBSERVED SLOPE PERCENT	RESIDUAL DRY MATTER MINIMUM AVERAGE HEIGHT STANDARD	RESIDUAL DRY MATTER AVERAGE HEIGHT OBSERVED IN PHOTO
Photo #_____			
Grassland	___ 0 to 10%	2 inches	____ inches
	___ 11 to 30%	3 inches	____ inches
	___ >30%	4 inches	____ inches
Oak Woodland	___ 0 to 10%	2 inches	____ inches
	___ 11 to 30%	3 inches	____ inches
	___ > 30%	4 inches	____ inches
Coastal Prairie	___ 0 to 10%	4 to 6 inches	____ inches
Photo #_____			
Grassland	___ 0 to 10%	2 inches	____ inches
	___ 11 to 30%	3 inches	____ inches
	___ >30%	4 inches	____ inches
Oak Woodland	___ 0 to 10%	2 inches	____ inches
	___ 11 to 30%	3 inches	____ inches
	___ > 30%	4 inches	____ inches
Coastal Prairie	___ 0 to 10%	4 to 6 inches	____ inches

HEARST RANCH CONSERVATION EASEMENT
FORAGE CLIPPINGS, PRODUCTION, COMPOSITION
MONITORING CHECKLIST #6 – DATE_____PAGE #1

Forage Clipping Location Map # (Plate 1)	Range Site	Dominant Vegetation Types for 2008	Average Year Forage Per Range Site and 2008 Clippings _____lbs/acre and ____forage height
1			_____lbs/acre Average Year _____lbs/acre _____inches forage height
2			_____lbs/acre Average Year _____lbs/acre _____inches forage height
3			_____lbs/acre Average Year _____lbs/acre _____inches forage height
4			_____lbs/acre Average Year _____lbs/acre _____inches forage height

HEARST RANCH CONSERVATION EASEMENT
COLOR AERIAL PHOTOGRAPH INTERPRETATION
MONITORING CHECKLIST #7 – DATE_____PAGE #___

PHOTO # AND LOCATION	PLANT COMMUNITIES	5 YEAR COMPARATIVE VEGETATION CHANGES	INFRASTRUCTURE, EROSION, FIRE OR OTHER CHANGES

Annual precipitation records are an important part of any monitoring effort and shall be included in each yearly monitoring report on the spaces provided in the relevant Monitoring Checklists. Rainfall records are available from the BLM for the Piedras Blancas Lighthouse and from the California State Parks for Hearst Castle. These rainfall totals are representative of rainfall in the coastal and coastal- upland areas of the Hearst Ranch. A comparison with available average rainfall and average rainfall distribution records shall be made yearly to ascertain whether or not the rainfall was normal in amount and distribution for the monitoring year. These yearly rainfall amounts and distribution averages shall also be summarized for the five-year forage production Monitoring Checklist #6 and the color aerial photo interpretation Monitoring Checklist #7.

The completed applicable Monitoring Checklists shall be compiled and placed in a three ring binder with the monitoring year date shown on the tab. If a Monitoring Checklist item does not apply place an NA – not applicable in the appropriate column. Monitoring shall commence in the fall of 2004 or 2005 so the first tab date will be 2004 or 2005. The easement holder shall keep one binder and the Hearst Corporation shall be given a duplicate binder for their files. Subsequent monitoring year checklists and tabs shall be placed in the first binder, and when full, additional binders and tabs shall be utilized. Agency review of monitoring information shall follow protocols as defined in the recorded Conservation Easement.

A short executive summary shall be included in the monitoring report that summarizes the results of each monitoring year. This summary shall be provided to the Wildlife Conservation Board, or its successor agency, for inclusion in its public files.

Attachment

California Section, Society for Range Management Program for Certification of Professional Rangeland Manager

The California Section of the Society for Range Management (CA-SRM) seeks to promote and strengthen professional standards in all activities devoted to rangeland resources. The CA-SRM's professional certification program is designed to evaluate the education and professional experience of rangeland managers.

A professional rangeland manager applies scientific principles to the art and science of managing rangelands and range. Rangelands are lands supporting grass, shrub, and savanna vegetation types. Range is land grazed by livestock. This program of certification is a service provided by the CA-SRM as a means for demonstrating the special expertise required to practice as a professional rangeland manager.

Certification constitutes recognition by the CA-SRM that, to its best knowledge, an applicant meets minimum educational, experience, and ethical standards adopted by the CA-SRM for professional rangeland managers. This program serves the unique needs for certification of professional rangeland managers in California and is not intended to compete with the Society for Range Management's certification of Range Management Consultants.

I. Purpose:

Establish minimum standards for professional rangeland managers and provide a process for rangeland managers to demonstrate professional competency.

II. Certification categories:

Certificates will be issued in two categories.

A. A Certified Rangeland Manager (CRM) meets the educational experience requirements and experience requirements.

B. An Associate Rangeland Manager (ARM) meets the educational requirements. This category is intended as a preliminary step towards full certification.

III. Requirements for eligibility:

Evidence of eligibility will be furnished by the applicant as a completed application form and pertinent supporting documents. Certification does not constitute a guarantee by CA-SRM that the applicant meets any certain standard of competence or possesses any specific knowledge. Requirements for certification, periodic renewal, and decertification may be changed upon majority vote of the Board of Directors, CA-SRM.

A. **Education:**

1. Completion of a course of study in a college or university leading to a bachelor's or higher degree.

2. A degree in range management or completion of coursework including the following topics: rangeland ecology, rangeland plant physiology, rangeland animal management, rangeland policy and planning, and rangeland measurements.

3. Other combinations of education and experience may, at the discretion of the Certification Committee, be accepted as equivalent to requirements 1 and 2, above.

4. Completion of minimum educational requirements permits application for associate status.

B. **Experience:**

1. Five years (60 months full-time equivalent) of qualifying professional experience.

2. Qualifying experience begins after completion of minimum educational requirements.

3. All qualifying experience must be directly related to range and/or rangeland management and include demonstration of the application of rangeland management principles. Experience in a California rangeland type is required.

4. Qualifying experience is defined as those activities demonstrating professional competence in the science, art, and practice of managing and using for human benefit the natural resources that occur on and in association with rangeland and range, and more particularly classified as:

(a) rangeland vegetation management, which includes the management of vegetation composition and productivity, animal habitat, revegetation, and the control of undesirable plants.

(b) rangeland animal management, which includes the management of wild and domestic herbivores, including development of grazing systems, and practices for managing and controlling livestock on range.

(c) rangeland ecology, which includes the protection of natural vegetation, ecosystem restoration and rehabilitation, and research into ecosystem and landscape processes.

(d) rangeland policy and planning, which includes the development of rangeland and range management plans, and analysis and interpretation of laws and policies pertaining to rangeland and range management.

(e) rangeland measurements, which includes rangeland resource assessment and analysis of range condition.

(f) an understanding of economics as it relates to sustainable rangeland productivity.

5. Education toward a higher degree may be substituted for up to 2 years (24 months) of experience.

C. **References:**

1. Three letters of reference by professional rangeland managers attesting to the applicant's qualifications. At least one letter must be from a Certified Rangeland Manager.

D. **Ethical and Continuing Education requirements:**

1. All applicants must pledge to conduct their activities in accordance with the Code of Ethics of the Society for Range Management, quoted below.

"Each member will:

i. foster an environment where all people are encouraged to participate in the Society and management and enjoyment of rangelands;
ii. use her/his knowledge, skills, and training when appropriate to find ways to harmonize people's needs, demands, and actions with the maintenance and enhancement of natural and managed rangeland ecosystems;
iii. promote competence in the field of range management by supporting high standards of education, employment, and performance;
iv. manage or perform services consistent with the highest standards of quality, integrity, and with respect for the rangeland plant and animal resources, the employer, and the public; soil, water, air;
v. disseminate information to promote understanding of, and appreciation for, values of rangelands to those with a direct involvement in range management, and to the general public as well;
vi. offer professional advice only on those rangeland issues in which they are informed and qualified through professional training and experience;
vii. in any communication, give full and proper credit to, and avoid misinterpretation of, the work, ideas, and achievements of others; and
viii. encourage the use of sound biological information in management decisions."

2. The CRM learns about new developments in rangeland science and management through participation in professional society and continuing education activities. The Panel on Certification shall request CRM's to document activities related to continuing education and maintaining currency in the professional discipline.

E. **Examination:** Each applicant for CRM will be required to pass an examination to be conducted by the Certification Panel.

IV. Certification panel:

The certification panel shall be comprised of at least six licensed CRM's, chosen to represent a broad cross-section of employment, expertise, and interests. The panel shall determine the eligibility of all applicants and shall have authority to confer and renew certification as professional rangeland manager. The panel will have authority to review allegations of misconduct and take appropriate actions, including decertification. Members of the panel will be appointed to staggered three-year terms by the Board of Directors of the CA-SRM.

V. Schedule of Fees:

A. Application fees shall be:

1. Certified rangeland manager: $50.00 for members of the California Section, $100.00 for non-members.

2. Associate rangeland manager: $25.00 for members of the California Section, $50.00 for non-members. Application fee for change of status from ARM to CRM: $25.00 for Section member, $50.00 for non-member.

B. Fee schedules are subject to change by recommendation of the Panel on Certification and approval of the Section Board of Directors.

VI. Appeals:

Appeals of certification denial may be made through the Panel on Certification for review by the Section Board of Directors. The Board may review actions by the panel upon request from any applicant for certification.

VII. Violations of professional standards:

A. A charge of misconduct against an Associate or Certified Rangeland Manager may be filed by transmitting to any member of the Panel on Certification a sealed statement of the charge. Such a statement must be accompanied by an affidavit of the complainant setting forth the allegations on which the charge is based, including dates, and the specific conduct involved. Copies of the charge, affidavit, and supporting documentation shall be transmitted to the members of the Panel on Certification. The Panel shall review the charge and within 20 days of receipt of the charges determine, by majority vote if necessary, if further inquiry is warranted.

B. If the panel determines that further inquiry is warranted, the Chair of the Certification Panel shall notify the ARM or CRM of the specific charge by forwarding copies of the charge, affidavit, and all supporting documentation and request a written response from the ARM/CRM be filed with the Certification Panel within 30 days.

C. Upon receipt of the ARM or CRM's response the Panel on Certification shall review the evidence and make a recommendation. The recommendation will be forwarded to the Board of Directors of the California Section of the Society for Range Management who will then make a final decision.

D. Failure to respond to a complaint without written explanation shall be deemed admission of misconduct.

E. Appeals of decisions may be made within 30 days of notification of action by notifying the Chair of Panel on Certification. Upon appeal the complainant and the ARM/CRM will be permitted to supply any additional information in support of the action. These materials will be reviewed by the Panel on Certification which will again make a recommendation to the Board of Directors. The Board will reconsider the evidence and, on an appeal, the complainants and the ARM/CRM will have the right to appear in person before the Board of Directors. The Board of Directors will then issue a final ruling.

F. Disciplinary actions that may be taken by the Board of Directors, upon recommendation from the Panel on Certification against a ARM or CRM found incompetent or in violation of the code of ethics, include censure, suspension of certification for a specified time, or revocation of certification.

Source: http://www.casrm.org/CERT2RQM.pdf.